

Notice of Allowability

Application No.

09/939,294

Examiner

Sandra M. Nolan

Applicant(s)

DING ET AL.

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

☒ This communication is responsive to the response dated 26 October 2004.

☒ The allowed claim(s) is/are 1-3, 7-34, 37-85 and 91-95.

☒ The drawings filed on 8/24/01 are accepted by the Examiner.

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

☐ Notice of References Cited (PTO-892)

☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12-10-04

☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20050104.

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

S.M. Nolan-Rayford
SANDRA M. NOLAN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Barrett (312/807-4204) on 04 January 2005.
3. The application has been amended as follows:

In the Claims

Claims 35-36 and 86-90 are cancelled and their captions have been changed from "(withdrawn)" to -- (canceled) --.

In line 1 of each of claims 17-34, 37-85 and 91-95, the expression "(withdrawn)" has been deleted and replaced with -- (previously presented) --.

Remarks

Non-elected pending claims covering the blends of the invention have been rejoined with claims 7-12. Non-elected pending claims covering embodiments that do not call for blends have been cancelled.

The captioning of the rejoined claims has been revised to comport with current USPTO practice.

Reasons for Allowance

Withdrawal of Rejections

4. The following is an examiner's statement of reasons for allowance:

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5. All of the prior art rejections set out in the 20 July 2004 office action are withdrawn in view of the arguments presented on page 12 of the 26 October 2004 response.

Summary of Base Claims

6. The base claims are claims 1, 17, 25, 33, 37, 53, 69, 70 and 83. They can be summarized as follows:

Claim 1 covers a polymer blend useful for making medical products comprising:

-1 to 99% of a first low crystallinity syndiotactic 1,2-polybutadiene having a first melting temperature, and

-1 to 99% of a second syndiotactic 1,2-polybutadiene having a melting temperature higher than that of the first syndiotactic 1,2-polybutadiene.

Claim 17 covers a tubing having a sidewall made of a blend comprising:

-1 to 99% of a first 1,2-polybutadiene having a first melting temperature, and

-1 to 99% of a second 1,2-polybutadiene having a melting temperature higher than that of the first syndiotactic 1,2-polybutadiene

Claim 25 covers a tubing having a sidewall made of the blend recited in claim 1, which tubing is exposed to sterilizing radiation.

Claim 33 covers tubing for use with an infusion pump made of the blend recited in claim 1, which tubing is exposed to sterilizing radiation.

Claim 37 covers multiple layered tubing comprising:

-a first layer of the blend recited in claim 17, and

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-a second layer of a polymeric material disposed concentrically with respect to the first layer.

Claim 53 covers a multiple layered tubing comprising:

(a) a first layer of a blend of:

-1 to 99% of a first low crystallinity syndiotactic 1,2-polybutadiene having a first melting temperature below about 90 degrees C, and

-1 to 99% of a second syndiotactic 1,2-polybutadiene having a melting temperature higher than about 91 degrees C.

(b) a second layer of a polymeric material disposed concentrically with respect to the first layer.

Claim 69 covers a multiple layered tubing comprising:

(a) a first layer of a blend of:

-1 to 99% of a first low crystallinity syndiotactic 1,2-polybutadiene having a first melting temperature below about 90 degrees C, and

-1 to 99% of a second syndiotactic 1,2-polybutadiene having a melting temperature higher than about 91 degrees C.

(b) a second layer of a polymeric material disposed concentrically with respect to the first layer,

wherein the tubing has been exposed to sterilizing radiation.

Claim 70 covers a multiple layered tubing comprising:

(a) a first layer of a blend of:

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-1 to 99% of a first low crystallinity syndiotactic 1,2-polybutadiene having a first melting temperature below about 90 degrees C, and

-1 to 99% of a second syndiotactic 1,2-polybutadiene having a melting temperature higher than about 91 degrees C.

(b) a second layer of a polymeric material disposed concentrically with respect to the first layer,
wherein the tubing has been exposed to sterilizing radiation.

Claim 83 covers a multiple layered tubing comprising:

(a) a first layer of a blend of:

-1 to 99% of a first low crystallinity syndiotactic 1,2-polybutadiene having a first melting temperature below about 90 degrees C, and

-1 to 99% of a second syndiotactic 1,2-polybutadiene having a melting higher than about 91 degrees C.:

(b) a second layer of a polymeric material disposed concentrically with respect to the first layer and attached thereto, which second layer is a blend comprising:

-1 to 99% of a third low crystallinity syndiotactic 1,2-polybutadiene having a first melting temperature below about 90 degrees C, and

-1 to 99% of a fourth 1,2-polybutadiene having a melting higher than about 91 degrees C.,

wherein the tubing has been exposed to sterilizing radiation.

None of the available prior art teaches or suggests medical products/tubing made from blends of 1,2-polymerized butadienes, which blended polymers meet the melting

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temperature requirements recited in claims 1, 17, 25, 37, 53, 69, 70 and 83. The claimed 1,2-isomers are distinguished from 1,3- and 1,4-isomers at page 4, lines 28-30 of applicants' the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can normally be reached Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the examiner are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498.

The fax number for patent application documents is 703/872-9306.



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09939294(20050104)

SANDRA M. NOLAN -RAYFORD
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